

Typical 4-year Curriculum

BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING

(ABET Accredited)

First Semester	Units	Second Semester	Units
FRESHMAN YEAR			
ENGR 102A+B	Intro. To Engineering	MATH 129	Calculus II
MATH 125*	Calculus I (see note below)	AME 105	Intro. To MATLAB I
Or { Math 122a (1) +122b (4)		PHYS 141	Introductory Mechanics
CHEM 151	General Chemistry 1	ECE 175	Computer Prog. For Engr. Appl.
ENGL 101	First Year Composition	ENGL 102	First-Year Composition
XXXX**	General Education	XXXX**	General Education
<i>Total</i>	16	<i>Total</i>	17
SOPHOMORE YEAR			
MATH 223	Vector Calculus	MATH 254	Introduction to Ordinary Differential Equations
PHYS 241	Introductory Electricity and Magnetism	AME 230	Thermodynamics
CE 214	Statics	AME 250	Dynamics
ABE 221/CE 210	Intro to CAD/Engineering Graphics	AME 220^s	Intro to Aerospace Engineering
XXXX**	General Education	AME 205	Intro to MATLAB II
<i>Total</i>	17	XXXX**	General Education
		<i>Total</i>	18
JUNIOR YEAR			
AME 300	Instrumentation Laboratory	AME 302	Numerical Methods
AME 301	Engineering Analysis	AME 324L	Mechanics of Materials Laboratory
AME 324A	Mechanical Behavior of Engineering Materials	AME 321^s	Aircraft Performance
AME 320	Aerodynamics	AME 323^s	Gasdynamics
MSE 331R	Fundamentals of Materials for Engineers	AME 324B^{s (or C)}	Engineering Component Design
AME 313	Machine Shop	XXXX**	General Education
<i>Total</i>	16	<i>Total</i>	16
SENIOR YEAR			
AME 420^F	Aircraft Conceptual Design	AME 401^s	Senior Aerospace Laboratory
AME 457^F	Orbital Mechanics	AME 463^s	Finite Element Analysis w/ANSYS
AME 425^F	Aerospace Propulsion	OR	
AME 427^F	Stability and Control of Aerospace Vehicles	AME 431^s	Num Methods in Fluid Mech + Heat Trans
AME 495^{sF}	Colloquium	AME 422^s	Aerospace Engineering Design
Tech Elective ^s		XXXX**	General Education
		AME 4XX	Tech Elective ^s
<i>Total</i>	16	<i>Total</i>	14

Courses in bold, when taken at the UA, are used to calculate your Advanced Standing (AS) GPA.

*MATH 122A/B is a 5-unit version of MATH 125. Enrollment in MATH 122A/B or 125 is dependent on MATH placement exam scores.

** Courses must meet University general education requirements including the Diversity requirement.

§See list of approved Technical Elective courses.

Courses with "F" and "S" superscripts denote fall- and spring-only courses. Courses without superscripts are taught both semester.